

Chapter 1 The Science of Biology

Section Review 1-2

Reviewing Key Concepts

Short Answer *On the lines provided, answer the following questions.*

1. List some variables that can change in an experiment, and discuss the importance of a control group.

2. Describe a historical experiment performed to test the theory of spontaneous generation. Be sure to identify the control and variable tested.

3. What is a theory?

Reviewing Key Skills

Classifying *On the lines provided, use the letters A–E to place the following steps of an experimental investigation in the correct order. (A is the first step, E is the last step.)*

- _____ 4. form a hypothesis
- _____ 5. record and analyze results
- _____ 6. draw a conclusion
- _____ 7. ask a question
- _____ 8. set up a controlled experiment

9. **Inferring** Why is it necessary for scientists to record and publish their experiments and results?

10. **Applying Concepts** Can an experiment that has several variables be used to explain a theory? Explain your answer.
